

## Abstract of the Invention

The invention provides methods of forcing  
5 recombination between polynucleotides. The methods can  
include the steps of, (a) generating a single strand of a  
first polynucleotide; (b) generating a single strand of a  
second polynucleotide, wherein the second polynucleotide  
is partially complementary to the first polynucleotide;  
10 (c) fragmenting the single strand of the first  
polynucleotide to generate single stranded first  
polynucleotide fragments; (d) fragmenting the single  
strand of the second polynucleotide to generate single  
stranded second polynucleotide fragments; (e) annealing  
15 the single stranded first polynucleotide fragments with  
the single stranded second polynucleotide fragments; and  
(f) extending the annealed polynucleotide fragments.